Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) An AC adaptor connectable to a main body of an apparatus through a power line, comprising:

a rectifying and smoothing circuit to rectify and smooth ~~unit for rectifying and smoothing~~ an ~~inputted~~ alternating current voltage;

a switching section to switch the ~~unit for switching the voltage~~ rectified and smoothed alternating current voltage at a prescribed operating frequency, wherein a level of the prescribed operating frequency is proportional to a value of an output voltage of the AC adaptor in a voltage line associated with the power line; ~~by said rectifying and smoothing unit; and~~

an operating frequency control ~~supplying~~ unit to control the prescribed ~~for supplying an~~ operating frequency of the switching section based on a control line associated with the power line ~~performed by said switching unit~~, wherein ~~said~~ the operating frequency control ~~supplying~~ unit ~~supplies~~ controls the switching section to switch according to a first operating frequency ~~to said switching unit~~ when ~~said~~ the main body of the apparatus operates ~~normally~~ in a normal state, and ~~supplies~~ controls the switching section to switch according to a second operating frequency, ~~which is lower than said first operating frequency, to said switching unit~~ when the power line ~~to said~~ is separated from the main body of the apparatus ~~is separated,~~ or when ~~said~~ the main body of the apparatus is in a prescribed standby state, the second operating frequency being lower than the first operating frequency; and

a plug to connect the power line to the main body of the apparatus, wherein the plug comprises an operating section that provides a control signal through the control line to the operating frequency control unit to switch the prescribed operating frequency from the second

operating frequency to the first operating frequency when the plug is connected to the main body of the apparatus.

2. (Cancelled)

3. (Currently Amended) The AC adaptor according to Claim 1, wherein ~~said~~ the power line comprises a the voltage line, ~~for a secondary output voltage outputted on the basis of switching by said switching unit and~~ a DC return line, ~~as well as a~~ and the control line for switching the prescribed operating frequency ~~supplied by said operating frequency supplying unit~~.

4. (Currently Amended) The AC adaptor according to Claim 3, wherein the control signal to switch the prescribed operating frequency ~~supplied by said operating frequency supplying unit is switched~~ is generated by short-circuiting or opening ~~said~~ the control line against ~~said~~ the DC return line.

5. (Currently Amended) A power supply device for supplying electric power to ~~the~~ a main body of ~~the~~ an apparatus by performing a prescribed switching operation, comprising:

a switching unit to perform ~~for performing~~ a switching operation for ~~the~~ a primary power source; ~~and~~

a control unit to control ~~for controlling~~ the switching operation performed by ~~said~~ the switching unit, wherein ~~said~~ the control unit controls ~~said~~ the switching unit ~~on the basis of the~~ to switch according to a first operating frequency when the main body of the apparatus is operating in a normal state, and controls ~~said~~ the switching unit ~~on the basis of the~~ to switch according to a

second operating frequency, ~~which is lower than said first operating frequency~~ when ~~said~~ the main body of the apparatus is operating in a low power consumption mode, the second operating frequency being lower than the first operating frequency; and

a plug to connect the power supply device to the main body of the apparatus, wherein the plug comprises an operating section that provides a control signal to the control unit to switch a switching frequency of the switching unit from the second operating frequency to the first operating frequency when the plug is connected to the main body of the apparatus.

6. (Currently Amended) The power supply device according to Claim 5, further comprising:

an output voltage line to supply ~~required for supplying~~ electric power to ~~said~~ the main body of the apparatus, ~~and~~ a DC return line, ~~as well as~~ and a control line, ~~the~~ a state of ~~which is~~ the control line being changed by whether ~~said~~ the main body is in a low power consumption mode or not,

wherein ~~said~~ the control signal for switching ~~line switches~~ between the first operating frequency and ~~said~~ the second operating frequency comprises the state of the ~~on the basis of said~~ control line.

7. (Currently Amended) The power supply device according to Claim 6, wherein the state of ~~said~~ the control line is changed by ~~the~~ operation of a controller within ~~from said~~ the main body of the apparatus.

8. (Cancelled)

9. (Currently Amended) A Voltage Supply apparatus comprising:

an electrical ~~equipment~~ device connected to an alternating current power source through a DC voltage supply device that is separate from the electrical device,

a wherein the DC voltage supply device ~~for supplying~~ supplies a DC voltage to ~~the~~ a main body of the electrical device, ~~wherein said~~ the DC voltage supply device ~~comprises:~~ including,

a rectifying and smoothing circuit ~~unit for rectifying and smoothing~~ to rectify and smooth an ~~inputted~~ alternating current voltage from the alternating current power source;

a switching unit to switch ~~for performing switching~~ the ~~voltage~~ rectified and smoothed alternating current voltage ~~by said rectifying and smoothing unit~~;

an operating frequency supplying unit ~~for supplying the~~ to supply a first operating frequency of switching performed by ~~said~~ the switching unit when the electrical device is operating in a normal state and supply a second ~~an~~ operating frequency ~~of a low~~ frequency ~~for a~~ when the electrical device is operating in a standby state ~~mode~~, the second operating frequency being lower than the first operating frequency; and

a plug to connect the DC voltage supply device to the main body of the electrical device, wherein the plug comprises a plug end configured to be inserted into a jack of the main body of the electrical device; and

~~said~~ the main body of the electrical device includes control circuitry operable to shift ~~shifts said~~ an operating frequency supplied by the operating frequency supplying unit to the second operating frequency ~~said waiting mode~~ when ~~said~~ the main body of the electrical device is operating in the ~~a preseribed~~ standby state even if the DC voltage supply device is connected to the main body of the electrical device.

10. (Currently Amended) The apparatus according to Claim 9, wherein ~~said~~ the

~~prescribed~~ standby state includes a soft-off or suspend state of ~~said~~ the main body of the electrical device ~~apparatus~~.

11. (Currently Amended) An electrical device comprising:

an AC adaptor connected to an alternating current power source, ~~and for supplying~~ the AC adaptor to supply a DC voltage;

a main apparatus connected to ~~said~~ the AC adaptor through a power line, ~~and~~ the main apparatus being activated by ~~an~~ the DC voltage output ~~voltage~~ from ~~said~~ the AC adaptor; ~~and~~

a rectifying and smoothing circuit to rectify and smooth an alternating current voltage from the alternating current power source;

a switching section to switch the rectified and smoothed alternating current voltage at a prescribed operating frequency, wherein a level of the prescribed operating frequency is proportional to a value of the DC voltage supplied from the AC adaptor; and

an operating section that operates to change the prescribed operating frequency of the switching section depending on ~~the~~ a state of connection between ~~said~~ the AC adaptor and ~~said~~ the main apparatus through ~~said~~ the power line,

wherein the operating section is built into a plug located at an end of the power line that connects the AC adaptor to the main apparatus, wherein the operating section respectively implements the changing of the prescribed operating frequency of the switching section corresponding to when the plug is attached and detached from the main apparatus.

~~wherein said AC adaptor activates a switching circuit by the direct current power converted from an alternating current power, converts the output from said switching circuit and supplies the DC voltage to said main apparatus, and shifts the state of said switching circuit to a low power mode on the basis of the operation of said operating section performed corresponding~~

~~to the opening of said power line.~~

12. (Currently Amended) The device according to Claim 11, wherein the operating section reduces the prescribed operating frequency from a normal operating frequency when the plug is detached from the main apparatus or when the main apparatus is operating in low power mode. ~~said AC adaptor in said low power mode activates said switching circuit with an operating frequency lower than a normal operating frequency.~~

13. (Cancelled)

14. (Currently Amended) A method for ~~controlling~~ operating an AC adaptor that supplies a DC voltage to ~~the~~ a main body of an apparatus through a power line, the method comprising:

rectifying and smoothing an alternating current voltage;

switching the rectified and smoothed alternating current voltage at a prescribed operating frequency, wherein a level of the prescribed operating frequency is proportional to a value of an output voltage of the AC adaptor in a voltage line associated with the power line;

controlling the prescribed operating frequency based on a control line associated with the power line, wherein the prescribed operating frequency is controlled to switch according to a first operating frequency when the main body of the apparatus operates in a normal state, and the prescribed operating frequency is controlled to switch according to a second operating frequency when the power line is separated from the main body of the apparatus or when the main body of the apparatus operates in a prescribed standby state, the second operating frequency being lower than the first operating frequency; and

connecting the power line to the main body of the apparatus through a plug, wherein the plug comprises an operating section that provides a control signal through the control line to the operating frequency control unit to switch the prescribed operating frequency from the second operating frequency to the first operating frequency when the plug is connected to the main body of the apparatus.

~~by switching the voltage obtained by rectifying and smoothing an alternating current voltage,~~

~~wherein switching is performed at a first operating frequency when said main body of the apparatus is performing a normal operation, and~~

~~switching is performed at a second operating frequency that is lower than said first operating frequency when said main body of the apparatus is in a prescribed standby state.~~

15. (Currently Amended) The method for operating an AC adaptor ~~controlling a power supply device~~ according to Claim 14, wherein ~~said~~ the prescribed standby state is ~~that~~ a state in which the main body of the apparatus ~~if~~ operates in a soft-off or suspend state.

16. (Currently Amended) The method for operating an AC adaptor ~~controlling a power supply device~~ according to Claim 14, further comprising:

generating a control signal to switch the prescribed operating frequency by short-circuiting or opening the control line against a DC return line associated with the power line.

~~wherein a prescribed controlled state is produced on the basis of the state of connection of the line between said power supply device and said main body of the apparatus, and~~

~~switching is performed by said first operating frequency or said second operating~~

~~frequency on the basis of said produced prescribed controlled state.~~

17. (New) An AC adaptor connectable to a main body of an apparatus through a power line, comprising:

a rectifying and smoothing circuit to rectify and smooth an alternating current voltage;

a switching section to switch the rectified and smoothed alternating current voltage at a prescribed operating frequency, wherein a level of the prescribed operating frequency is proportional to a value of an output voltage of the AC adaptor in a voltage line associated with the power line;

an operating frequency control unit to control the prescribed operating frequency of the switching section, wherein the operating frequency control unit controls the switching section to switch according to a first operating frequency when the main body of the apparatus operates in a normal state, and controls the switching section to switch according to a second operating frequency when the power line is separated from the main body of the apparatus or when the main body of the apparatus is in a prescribed standby state, the second operating frequency being lower than the first operating frequency; and

a plug to connect the power supply to the main body of the apparatus, wherein the plug comprises,

a plug end configured to be inserted into a jack of the main body of the apparatus;

a fixed portion operable to be held by a user for attachment of the plug to the jack and detachment of the plug from the jack; and

a moveable portion that retracts into the fixed portion when the plug end is inserted to the jack and springs out from the fixed portion when the plug end is detached from the jack, wherein the plug provides a control signal through the control line to the

operating frequency control unit for switching the prescribed operating frequency from the second operating frequency to the first operating frequency when the plug end is inserted to the jack and switching the prescribed operating frequency from the first operating frequency to the second operating frequency when the plug end is detached from the jack.

18. (New) The AC adaptor of claim 17, wherein the plug end comprises a barrel type end plug.

19. (New) The AC adaptor of claim 18, wherein the jack comprises a 2-pin power input jack.